EIIP Project Outline

Sponsoring Committee: EIIP Projections Committee

Project Title: Technical Assistance for Emission Projection Comparison

Document

Contractor Support Funds: \$46,000

Description of Activities:

a. Compare Existing Emission Forecasting Tools and Models

This sub-task will focus on a comparative evaluation of existing emissions forecasting models and methods. The models to be evaluated include - the EPA's Multiple Projections System (MPS), the California Emission Forecasting System (CEFS), the Canadian emissions forecasting model identified by Libby Greenwood of Environment Canada, the EPA's Area Source Emissions Model (ASEM), the EPA's NONROAD model, EMS-95, SMOKE; and EPS-2.5.

The evaluation will include an investigation into each model's emissions inputs, growth inputs, control factor inputs, and the level at which they are applied (national level vs. State level). In comparing these forecasting tools, the Committee will evaluate each model against the following criteria - availability (i.e., is the model or its source code proprietary), coverage (e.g., source categories, pollutants, geography, time horizon), Specification detail (e.g., geographic specificity, source specificity), comprehensiveness concerning factors affecting future emissions (e.g., equipment turnover, technology/ process changes, emission regulations), currency/ease of updates (e.g., recentness of model inputs and ability/ease of updating these inputs), flexibility - (e.g., ability for user to select model assumptions, input own data), and documentation (i.e., an assessment of how well the model algorithms and input data are documented).

b. Research Alternative Emission Growth Surrogate Data

The Committee will also investigate alternate emission growth surrogate data (e.g., economic forecasts), to what is currently found in the existing Economic Growth Analysis Systems (EGAS) model (Version 3.0) and planned for the next EGAS model (Version 4.0). This review will include: Regional Financial Associates; DRI, which is a unit of Standard and Poor's, which is a division of McGraw-Hill, Inc.; Wharton Econometrics Forecasting Associates (WEFA); EPA's Energy 2020; and F.W. Dodge.

The emission projection comparison "white paper" to be prepared under this task will document the forecast data that are available from each of these sources and compare and contrast these data with the emission growth surrogate data planned for EGAS 4.0. This paper will also compare the aforementioned forecasting models using criteria

identified by the Committee.

Deliverables:

The emission projection comparison "white paper" will document the forecast data that are available from each of these sources and compare and contrast these data with the emission growth surrogate data planned for EGAS 4.0. This paper will also compare the aforementioned forecasting models. By July 17, 2000, a draft version of this "white paper" will be available, and a final "white paper," will be submitted to EPA by September 15, 2000.

Significant Dates (Start, End, Milestones):

Draft "white paper" July 17, 2000

Final "white paper" September 15, 2000

Comments:

Contact for Additional Information:

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